

### **REMARKS**

Claims 3, 15, 32, and 47 have been amended and claims 33-34 have been cancelled. New claims 54 and 55 have been added. No new matter is introduced by the amendments of these claims. The amendments of claims 3 and 47 and new claims 54 and 55 are supported on page 3, lines 26-29 and page 11, lines 1-5, among other places. Claims 1-55 remain pending.

The Examiner has objected to the drawings under 37 CFR 1.84(p)(5) because they do not include the reference label 503. This label has been added to Figure 5.

The Examiner has rejected claim 16 under 35 U.S.C. §112, second paragraph, as being indefinite as not providing antecedent basis for the limitation “detectors.” Claim 16 has been amended to provide antecedent basis for such limitation and for clarity purposes.

The Examiner rejected claims 15, 17, 32 under 35 U.S.C. §102(e) as being anticipated by Nasser-Ghodsi (U.S. patent 6,810,105). The Examiner has also rejected claims 1, 9-14, 18-19, 26-31, and 41-46 under 35 U.S.C. §103(a) as being unpatentable over Nasser-Ghodsi. Additionally, claims 2-8, 20-25, and 33-40 are rejected under 35 U.S.C. §103(a) as being unpatentable over Nasser-Ghodsi in view of Albert (U.S. patent 5,237,598). Claims 47-53 are rejected under 35 U.S.C. §103(a) as being unpatentable over Nagatusuka (U.S. patent 4,885,465) in view of Nasser-Ghodsi. The Examiner’s rejections are respectfully traversed as follows.

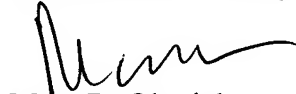
Since the reference Nasser-Ghodsi qualifies as 102(e) prior art and since the inventions of Nasser-Ghodsi patent and the current application were subject to an obligation of assignment to KLA-Tencor Technologies, Corp at the time of the invention (and are currently assigned as such), it is respectfully submitted that Nasser-Ghodsi should be withdrawn from being used to reject the current application under §103(a).

Claim 1 is rejected under 35 U.S.C. §103(a) as being unpatentable over Nasser-Ghodsi. Independent claim 15 has been amended to include a Markush group limitation that includes operations that are recited in original claims 18 and 19, which were rejected under 35 U.S.C. §103(a) as being unpatentable over Nasser-Ghodsi. Claim 32 has been amended to include the limitation of original claim 33, which was rejected under 35 U.S.C. §103(a) as being unpatentable over Nasser-Ghodsi in view of Albert (U.S. patent 5,237,598). Claim 47 was rejected under 35 U.S.C. §103(a) as being unpatentable over Nagatusuka (U.S. patent 4,885,465) in view of Nasser-Ghodsi. Since the reference Nasser-Ghodsi should be withdrawn as being used to reject each of the independent claims under 35 U.S.C. §103(a), it is respectfully submitted that claims 1, 15, 32, and 47 are patentable over the remaining references which fail to teach various limitations which the Examiner has relied upon Nasser-Ghodsi as teaching.

The Examiner's rejections of the dependent claims are also respectfully traversed. However, to expedite prosecution, all of these claims will not be argued separately. Claims 2-14, 16-31, 33-46, and 48-55 each depend directly or indirectly from independent claims 1, 15, 32, or 47 and, therefore, are respectfully submitted to be patentable over cited art for at least the reasons set forth above with respect to claims 1, 15, 32, or 47. Further, the dependent claims require additional elements that when considered in context of the claimed inventions further patentably distinguish the invention from the cited art. For example, claim 3 recites that "using the X-ray data to spatially resolve the location of the defect is accomplished by generating a three dimensional image based on the X-ray data." Claim 47 includes a processor operable to "characterize one or more defects based on the detected X-rays from the plurality of detectors so as to spatially resolve the one or more defects in three dimensions." Claims 54 and 55 recite that "the defect is spatially located in three dimensions." The cited references fail to teach or suggest such limitations. The references Nagatusuka and Albert fail to teach or suggest such limitations.

Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,  
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